

Title (en)  
Ozone production methods

Title (de)  
Verfahren zur Herstellung von Ozon

Title (fr)  
Procédé de production d'ozone

Publication  
**EP 1359120 A1 20031105 (EN)**

Application  
**EP 03252583 A 20030424**

Priority  
• US 37556002 P 20020425  
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Abstract (en)  
Methods of providing ozone at a selected pressure above atmospheric pressure include supplying a purge gas supply (22) pressurized above the selected pressure to at least one ozone adsorption apparatus (12); desorbing ozone from the ozone adsorption apparatus (12) with the pressurized purge gas supply (22); and delivering a mixture of ozone and the purge gas supply (24) at the selected pressure without further compression. One method includes providing a supply of compressed dry air (34) at a pressure above the selected pressure; diverting a first portion of compressed dry air (34) to an oxygen generator (23); generating an oxygen supply (15); directing the oxygen supply (15) to an ozone generator (11); generating an ozone-rich oxygen supply (16); passing the ozone-rich oxygen supply (16) through at least one pressure swing adsorption tower (13, 14) and adsorbing ozone from the ozone-rich oxygen supply (16) to provide an ozone-depleted oxygen supply (20); recycling the ozone-depleted oxygen supply (20) to the ozone generator (11); diverting a second portion of compressed dry air (34) to the pressure swing adsorption tower (13, 14) and desorbing ozone with the compressed dry air (34); and delivering the mixture of ozone and compressed air (24) at the selected pressure without further compression. <IMAGE>

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